

# HOUSE BILL REPORT

## E2SHB 1112

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### As Passed Legislature

**Title:** An act relating to reducing greenhouse gas emissions from hydrofluorocarbons.

**Brief Description:** Reducing greenhouse gas emissions from hydrofluorocarbons.

**Sponsors:** House Committee on Appropriations (originally sponsored by Representatives Fitzgibbon, Kloba, Peterson, Tharinger, Jinkins, Macri, Goodman, Bergquist, Doglio, Robinson, Pollet, Stanford and Frame).

**Brief History:**

**Committee Activity:**

Environment & Energy: 1/17/19, 1/24/19 [DPS];

Appropriations: 2/18/19, 2/20/19 [DP2S(w/o sub ENVI)].

**Floor Activity:**

Passed House: 3/1/19, 55-39.

Senate Amended.

Passed Senate: 4/15/19, 35-13.

House Refused to Concur.

Senate Receded.

Passed Senate: 4/22/19, 30-19.

Passed Legislature.

#### Brief Summary of Engrossed Second Substitute Bill

- Restricts hydrofluorocarbons (HFCs) and other substitutes for ozone-depleting substances (ODS) in products and equipment covered by a court-vacated 2015 United States Environmental Protection Agency regulation, and authorizes the Department of Ecology to adopt related rules.
- Directs the Department of Enterprise Services to establish a purchasing and procurement policy for products that do not use or were not manufactured using ODS substitutes or HFCs, or that are associated with HFCs or ODS substitutes with comparatively low global warming potential.
- Directs the State Building Code Council to adopt codes that do not require the use of restricted ODS substitutes.

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*This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not a part of the legislation nor does it constitute a statement of legislative intent.*

- Directs the Department of Ecology to consult with other agencies and submit a study and report to the Legislature by December 2020 addressing certain uses of HFCs.

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## HOUSE COMMITTEE ON ENVIRONMENT & ENERGY

**Majority Report:** The substitute bill be substituted therefor and the substitute bill do pass. Signed by 8 members: Representatives Fitzgibbon, Chair; Lekanoff, Vice Chair; DeBolt, Doglio, Fey, Mead, Peterson and Shewmake.

**Minority Report:** Without recommendation. Signed by 2 members: Representatives Dye, Assistant Ranking Minority Member; Boehnke.

**Minority Report:** Do not pass. Signed by 1 member: Representative Shea, Ranking Minority Member.

**Staff:** Jacob Lipson (786-7196).

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## HOUSE COMMITTEE ON APPROPRIATIONS

**Majority Report:** The second substitute bill be substituted therefor and the second substitute bill do pass and do not pass the substitute bill by Committee on Environment & Energy. Signed by 19 members: Representatives Ormsby, Chair; Bergquist, 2nd Vice Chair; Robinson, 1st Vice Chair; Cody, Dolan, Fitzgibbon, Hansen, Hudgins, Jinkins, Macri, Pettigrew, Pollet, Ryu, Senn, Springer, Stanford, Sullivan, Tarleton and Tharinger.

**Minority Report:** Do not pass. Signed by 13 members: Representatives Stokesbary, Ranking Minority Member; MacEwen, Assistant Ranking Minority Member; Rude, Assistant Ranking Minority Member; Caldier, Dye, Hoff, Kraft, Mosbrucker, Schmick, Steele, Sutherland, Volz and Ybarra.

**Staff:** Dan Jones (786-7118).

### **Background:**

#### Hydrofluorocarbons and Greenhouse Gas Emissions.

Hydrofluorocarbons (HFCs) are a category of gases used primarily as refrigerants in a variety of commercial and industrial applications. Hydrofluorocarbons are among the greenhouse gases (GHGs) identified by the United States Environmental Protection Agency (EPA) and the Department of Ecology (ECY) as a result of their capacity to trap heat in the Earth's atmosphere. According to the EPA, the global warming potential (GWP) of HFCs and other GHGs is measured as a function of how much of the gas is concentrated in the atmosphere, how long the gas stays in the atmosphere, and how strongly the particular gas affects global atmospheric temperatures. Under state law, the GWP of GHGs are measured in terms of their equivalence to the emission of an identical volume of carbon dioxide over a 100-year

timeframe (carbon dioxide equivalent or CO<sub>2</sub>e). In rules adopted by the ECY for purposes of measuring GHG emissions, the GWP of HFCs ranges from 12 to 14,800.

The ECY must report to the Governor and Legislature by December 31 of even-numbered years regarding total GHG emissions and GHG emissions by source sector in Washington. According the most recent report to the Legislature in December 2018, HFCs and other ozone-depleting substance (ODS) substitutes accounted for 3.76 million tons of CO<sub>2</sub>e out of the state's total reported GHG emissions of 97.4 million tons of CO<sub>2</sub>e in 2015.

#### Federal Regulation of Ozone-Depleting Substances.

In 1987 the United States and other members of the United Nations committed, in an agreement known as the Montreal Protocol, to phase out the use of certain ODSs. The United States Congress subsequently amended the federal Clean Air Act in 1990 to provide authority to the EPA to restrict the use of ODSs and to require manufacturers to use non-ozone depleting substitutes. In 1994 the EPA promulgated regulations authorizing the use of certain HFCs as a substitute for ODSs in specified products. However, in 2015 the EPA promulgated new regulations that entirely prohibited certain HFCs and other ODS substitutes or restricted their use to specified circumstances. Products and uses covered by the HFC restrictions in the EPA's 2015 regulations include aerosol propellants, motor vehicle air conditioning systems, retail food refrigeration and vending machines, and foams. In August 2017 the District of Columbia Circuit Court of Appeals vacated the portion of the EPA's 2015 regulations that applied to HFCs on the basis that the EPA had exceeded the statutory authority granted to it in 1990 to regulate substitutes of ODSs.

In 2018 the State of California enacted a law to restrict the ODS substitutes covered by the 2015 EPA rule.

#### State Clean Air Act.

The ECY and seven local air pollution control authorities (local air authorities) have each received approval from the EPA to administer aspects of the federal Clean Air Act in Washington. The Air Pollution Control Account is used to fund the ECY's responsibilities in developing and implementing the state Clean Air Act. Violations of the state Clean Air Act requirements are punishable by a variety of criminal and civil penalties. Civil penalties of up to \$10,000 per violation are authorized by the state Clean Air Act.

#### State Purchasing and Procurement.

The Department of Enterprise Services (DES) is responsible for providing products and services to support state agencies, and sets policies and procedures for the state's purchases. State agencies covered by the DES's procurement policies include all executive and judicial branches of state government including: offices; divisions; boards; commissions; higher education institutions; and correctional and other institutions. The DES may enter into agreements with other state agencies that delegate certain authority to those agencies to purchase their own goods and services.

State law establishes certain preferences for the procurement of goods or services that meet a variety of criteria, including goods and services through inmate work programs administered by the Department of Corrections, minority and women-owned businesses, goods that

contain recycled content, electronic products that meet environmental performance standards, and products that do not contain polychlorinated biphenyls (PCBs).

#### State Building Codes.

The State Building Code Council (Council) is a state agency that adopts and triennially updates the State Building Code (Code). The Code adopted by the Council establishes the minimum building, mechanical, fire, plumbing, and energy code requirements applicable to the construction of buildings.

#### **Summary of Engrossed Second Substitute Bill:**

##### Regulation of Hydrofluorocarbons.

The hydrofluorocarbons (HFCs) and ozone-depleting substance (ODS) substitutes specified in the court-vacated 2015 United States Environmental Protection Agency (EPA) regulations are restricted for the products and uses specified in the EPA regulations, with the exception of restrictions in the EPA regulations on motor vehicle air conditioning. Persons may not sell, install, offer for lease, rent, or otherwise cause restricted equipment or products to enter commerce in Washington. The following effective dates for restrictions applicable to products and equipment are established:

- January 1, 2020, for propellants, foam blowing agents such as polyurethane or spray foam, and supermarket systems, stand-alone systems, remote condensing units, and vending machines;
- January 1, 2021, for refrigerated food processing and dispensing equipment, compact residential consumer refrigeration products, polystyrene extruded boardstock and billet, and rigid polyurethane low-pressure two component spray foam;
- January 1, 2022, for residential consumer refrigeration products, except compact and built-in residential consumer refrigeration products;
- January 1, 2023, for built-in consumer refrigeration products and cold storage warehouses; and
- January 1, 2024, for centrifugal chillers and positive displacement chillers.

For any restricted uses covered in the 2015 EPA regulation but not covered by the above list, the effective date of the restrictions is the latter of January 1, 2020, or the effective date of the EPA regulation. Products manufactured prior to the effective date of a restriction may be sold, imported, exported, distributed, installed, and used after the effective date of the restriction, and persons that acquired products or equipment, including commercial refrigeration equipment, prior to the effective date are not required to cease use of restricted types of products or equipment. However, when products are retrofit from using one refrigerant to another, the products may not use a restricted HFC.

For restrictions in the EPA regulation on motor vehicle air conditioning, the Department of Ecology (ECY) may adopt rules restricting the uses addressed by the EPA regulation within 12 months of another state's enactment or adoption of such restrictions. These restrictions may address the manufacture, sale, lease, or other introduction into commerce by vehicle manufacturers. Restrictions on the use of ODS substitutes in motor vehicle air conditioning may not take effect prior to the effective date of the restrictions of at least one other state.

The ECY must expeditiously propose a draft rule to conform with any future EPA approval of certain previously prohibited HFC blends for foam blowing and spray foam.

The ECY may, by rule:

- modify the effective date of prohibitions if it determines that doing so reduces overall risk to human health and the environment and reflects the earliest date that an ODS substitute is available;
- prohibit ODS substitutes if the prohibition reduces overall risk to human health and the environment and lower-risk ODS substitutes are available; and
- add or remove ODS substitutes, use conditions, or use limits on approved substitutes, provided that doing so reduces overall risk to human health and the environment.

Manufacturers of products that contain or use ODS substitutes must disclose the use of the ODS substitutes in the form of:

- a label on the product or equipment that meets requirements established by the ECY by rule. The ECY must recognize existing labeling requirements to the extent feasible, must consider labeling requirements of other state building codes and other safety standards, and may not require labeling of aircraft or aircraft components;
- submitting information to the ECY about the use of ODS substitutes by December 2019, within 120 days of a restriction taking effect, and within 120 days of new products or equipment being introduced that are of a product class that use HFCs.

The ECY may adopt rules, and in doing so must seek to be consistent with or the same as the regulations adopted by the federal government or with other states that have adopted restrictions on HFCs and other ODS substitutes. Prior to adopting a rule, the ECY must cite the sources of information that it relied upon, including peer-reviewed science.

Acceptable uses for ODS substitutes for aircraft maintenance under the vacated EPA regulation must be interpreted by the ECY to apply to the production, manufacture, or repair of aircraft, aircraft parts, or aerospace vehicles and components. 2-BTP or other compounds being used in aerospace fire extinguishing systems are not considered ODS substitutes subject to state restrictions.

Violations of restrictions on ODS substitutes are subject to criminal and civil penalties under the state Clean Air Act. The Air Pollution Control Account may be used for purposes of developing and implementing the ODS substitute restrictions.

#### Other Provisions.

The Department of Enterprise Services (DES) must establish a purchasing procurement policy favoring HFC-free products, or products that use ODS substitutes with comparatively low global warming potential. Every two years beginning December 1, 2020, the DES must submit status reports to the Legislature regarding their implementation of this policy.

The State Building Code Council must adopt rules that permit the use of allowed ODS substitutes and that do not require the use of restricted ODS substitutes.

The ECY, in consultation with the Utilities and Transportation Commission and the Department of Commerce, must complete a study on how to increase the use of low global

warming potential HFCs in mobile sources, utility equipment, and consumer appliances, and how to reduce the use of other HFCs. The ECY must submit a report to the Legislature by December 1, 2020, that includes recommendations for incentivizing or providing grants to eliminate legacy uses of restricted HFCs or uses of unrestricted HFCs.

A severability clause is included.

**Appropriation:** None.

**Fiscal Note:** Available.

**Effective Date:** The bill takes effect 90 days after adjournment of the session in which the bill is passed.

**Staff Summary of Public Testimony (Environment & Energy):**

(In support) Hydrofluorocarbons (HFCs) are greenhouse gases whose emissions cause impacts on global warming that are hundreds or thousands of times as strong as carbon dioxide. This bill is consistent with international agreements and regulatory approaches being developed in other states. Unfortunately, federal efforts to regulate these pollutants recently stalled and have caused regulatory uncertainty for businesses, and states like Washington must keep the momentum. Transitioning to alternative refrigerants and other replacement chemicals present an opportunity for American industries and will create jobs. Cost-effective alternatives to HFCs are already on the market. California has already adopted most of the phase-out dates for products specified in the bill, and Maryland, Connecticut, and New York have initiated regulatory actions that are consistent with this proposed policy.

(Opposed) This bill goes further than other state laws do by banning hydrofluorocarbons for use in motor vehicle air conditioning. Automakers are able to accept the regulations on these chemicals in the foam products used in cars, but are not prepared to phase out their use in air conditioning as quickly as this bill requires. This bill might make it illegal to use commercial refrigeration systems such as walk-in refrigerators or refrigerated trucks that are already built and in-use. The Department of Ecology does not have the same subject-matter expertise with HFC regulation as the federal government, and should not have responsibility for creating lists of approved uses. Washington should copy the phase-downs of chemicals in the international agreement, rather than citing to a defunct federal regulation. State-by-state regulation of these products in international and interstate commerce is not appropriate. This policy chooses winners and losers within the industry.

(Other) Other actions besides restricting sales of products should be considered to address HFCs emissions, such as creating leak detection programs. The provisions on using restricted products should clarify that existing products are not illegal to continue to use. The criminal prosecution provisions are too heavy-handed. Washington should remain consistent with California's HFC regulations. Certification and labeling requirements regarding the use of HFCs should not introduce a state-by-state patchwork. The phase-out of HFCs should instead be referred to as a phase-down. The safety of alternative products must be considered in the design of the regulations.

**Staff Summary of Public Testimony (Appropriations):**

(In support) This bill provides for a reasonable transition away from hydrofluorocarbons (HFCs). Replacement products under the bill have all been reviewed by the Environmental Protection Agency for safety. Many of the concerns about timing have been taken into consideration in the current version of the bill.

(Opposed) Due to the restrictions under this bill, businesses which rely on cooling and refrigeration would pay higher prices for system maintenance and replacement products, which some businesses cannot afford. Consumers would also pay higher prices. The time provided to begin complying with the regulations is not enough. Replacement products may have flammability concerns and may not be readily available. The bill would create costs at the local government level.

(Other) The regulation on light duty vehicles does not provide enough time to be ready for compliance.

**Persons Testifying (Environment & Energy):** (In support) Representative Fitzgibbon, prime sponsor; Stu Clark, Department of Ecology; Christina Theodoridi, Natural Resources Defense Council; and Jessica Olson, Honeywell International.

(Opposed) Ryan Spiller, Alliance of Auto Manufacturers; Samantha Louderback, Washington Hospitality Association; Lisa Massaro, DowDuPont; Allen Karpman, Arkema Inc.; Holly Chisa, Northwest Grocery Association; and Carolyn Logue, Washington Food Supply Industry.

(Other) Chris Forth, Johnson Controls; Kevin Messner, Association of Home Appliance Manufacturers; and Helen Walter-Terrinoni, Air Conditioning, Heating, and Refrigeration Institute.

**Persons Testifying (Appropriations):** (In support) Matt Steuerwalt, Honeywell.

(Opposed) Allen Karpman, Arkema, Incorporated; and Carolyn Logue, Washington Air Conditioning Contractors Association.

(Other) Michael Transue, Association of Global Automakers.

**Persons Signed In To Testify But Not Testifying (Environment & Energy):** None.

**Persons Signed In To Testify But Not Testifying (Appropriations):** None.